

festatoris. *Caput* cum antennis nigris, harum apice extremo subpallidioribus articulisque duobus basalibus subtus inter-
dum flavis, clypeo in medio rufescenti, palpis albidis. *Thorax*
niger, confertissime punctatus, scutello semicirculari. *Pedes*
quatuor antici rufi, femoribus basi pallidioribus, coxis albidis,
tarsorum apice fusco; pedes 2 postici coxis femoribusque rufis,
horum apice extremo fusciscenti, tibiis tarsisque fuscis, illarum
basisubalbido fasciâque latâ centrali pallidè fuscis. *Alæ* hyalinæ
vix fumatæ, nervis fuscis, stigmatæque nigro, areolâ subtrian-
gulari, anticè haud appendiculatâ. *Abdomen* feminae, capite cum
thorace dimidio longius, fere thoracis latitudine, subcylindricum,
nigrum, punctatum, segmentorum margine et tuberculo laterali
elevato nitidioribus, segmento 1mo subquadrato, angulis anticis
rotundatis, utrinque impressione obliquâ notato; 2ndo latitu-
dine dimidio longiori; 3tio quadrato segmentisque sequentibus
brevioribus et longitudine decrescentibus. *Oviductus* corpore
toto dimidio longior, vaginis nigris subhirtis, terebra pallida.

(J. O. W.)

DESCRIPTION OF THE FIGURES.

PLATE III.

- Fig. 1. The Dead-Sea Apple of the natural size suspended from a twig and ex-
hibiting the mode of suspension.
Fig. 2. The same opened.
Fig. 3. One of the larger leaves of the tree upon which it is found.
Fig. 4. *Cynips insana*.
Fig. 5. *Ephialtes Sodomiticus*.

IV. *Descriptions of several new Species of exotic Hemip-
terous Insects.* By J. O. WESTWOOD, F. L. S., &c.

[Read November 2, 1835.]

Ordo HEMIPTERA.

Sub-Ordo HETEROPTERITA, Kirby.

Sectio TERRESTRIA.

Familia PENTATOMIDÆ.

Genus. EUMETOPIA. Plate II. fig. 4.

Scutelleræ affinis. Corpus parvum, obovatum; abdomine scutello
fere oblecto.

Caput breve, transversum, angulis anticis ante oculos productis et
internè curvatis, clypeoque in medio in lobum parvum qua-

dratum producto. Oculi laterales postici. Ocelli 2, inter se et oculos æquè distantes.

Antennæ (4 a) thorace breviores, 5-articulatæ, articulo 2do brevissimo, reliquis longitudine fere æqualibus, basali paullo breviori et crassiori, inter oculos et basin rostri, sub capitis margine insertæ.

Promusci (4 b) elongata, 4-articulata, articulis fere æqualibus.

Thorax transversus, anticè angustior, lateribus paullo rotundatis. Scutellum sub-quadratum, posticè rotundatum, abdomen fere obtegens. Hemelytrorum membrana nervis circiter 6 longitudinalibus, intermediis uni- vel bi-furcatis. Tibiæ spinosæ. Tarsi 3-articulati, articulo 2do brevissimo; ungues membranâ bipartitâ instructi.

Obs.—The remarkable structure of the head in the insect composing the type of this genus is totally unlike that of any other of the order with which I am acquainted.

Typus. *EUMETOPIA fissiceps*. Fig. 4.

Palidè fusco-testacea, undique fusco-punctata, capitis basi, fasciâ anticâ thoracis (in medio interruptâ) maculisque 4 scutelli (quarum anticâ majori) nigricantibus. Hemelytrorum corio lineis duabus fuscantibus, internâ in maculâ parvâ desinenti.

Long. corp. lin. 3. Expans. alar. lin. 6.

Habitat in Americâ meridionali.

In Mus. Dom. Hope, olim in Mus. Haworth.

Genus. *ONCOSCELIS*. Plate II. fig. 5.

Genus novum, è familiâ "*Scutati*," Burm. (*Pentatomites*, Laportii) *Tesseratomides* cum *Pentatomidis* conjungens.

Corpus magnum, depressum; capite parvo; abdomine magno, rotundato.

Caput parvum, subtrigonum, anticè paullo productum, subbifidum. Oculi magni laterales. Ocelli 2 postici.

Antennæ corporis dimidii longitudine, ante oculos insertæ, 5-articulatæ, articulo 1mo parvo; 2do, 4to et 5to elongatis, subæqualibus; 3tio, 1mi magnitudine; 5to ad apicem attenuato. *Promusci* (5 a) 4-articulata, ad basin pedum intermediorum fere extensa; articulo 2do reliquis multo longiori, his brevibus.

Thorax magnus, transversus, depressus, abdominis basis latitudine, angulis lateralibus subacutis. Scutellum magnum, triangulare, apice rotundato. Hemelytrorum corium nervo valido sub

costali, cum multis aliis minoribus per discum ejus currentibus; membranâ apicali nervis circiter 20 longitudinalibus.

Sternum et abdomen subtus mutica.

Pedes crassi, anteriores 4 sat breves, postici 2 (præsertim in ♂) incrassati; femoribus elongatis, tibiis brevibus, ad basin curvatis et versus apicem internum spinâ validâ armatis. Tarsi 3-articulati, articulo 1mo crasso, subtus spongioso, 2do brevi, 3tio brevi ad apicem incrassato, unguibus 2 sat validis, singulo membranâ instructo (5 b, pes posticus ♀).

Abdomen maximum, rotundatum, depressum, marginibus detectis.

Obs.—The possession of tarsal pulvilli, and the insertion of the antennæ, distinguish this genus from *Aspongopus*, Lap., whilst the simple sternum and abdomen remove it alike from *Rhaphigaster*, *Edessa*, *Tesseratoma*, *Oncomeris* and *Agapophyta*, which last three genera, moreover, have only four joints in the antennæ. In its simple sternum and abdomen and five-jointed antennæ it resembles the true *Pentatomidæ*, but its habit is certainly much nearer to that of the genera above mentioned.

Typus. *Oncoscelis Australasiæ*. Fig. 5.

Ferruginea: antennarum basi, scutello, abdominis lateribus, tibiisque nigricantibus.

Long. corp. lin. 14, latit. abdominis lin. 9.

Habitat in Nova Hollandia.

In Mus. Soc. Linn., Zool., et Entomol. Lond., Hope et nostr. Caput fuscum, supra luteo-variegatum, marginibus lateralibus elevatis, lineâque impressâ è clypeo ad verticem. Antennæ fuscae, articulis duobus apicalibus ferrugineis. Thorax ferrugineus, anticè pallidior, punctatus, lineisque multis transversis impressus, marginibus lateralibus paullo elevatis et lineâ tenui nigrâ notatis; ocellis duobus ovatis, nigris, versus marginem anticum positis. Scutellum nigrum, maculis duabus lateralibus ad angulos anticos, lineâ tenui centrali et regione apicali ferrugineis, apice ipso nigro. Hemelytrorum corium ferrugineum, nervis fulvis. Membrana apicalis fusco-ænea, nitida. Abdomen lateribus supra nigricantibus. Corpus totum subtus ferrugineum. Pedes ferruginei, tibiis nigricantibus.

Genus. CYCLOGASTER. Plate II. fig. 6.

Tesseratomæ affinis. Corpus magnum, planum, submembranaceum, abdomine fere circulari, thorace depresso.

Caput (6 a) parvum, planum, fere ovatum, clypeo lineâ longitudinali

centrali impressâ margineque acuto, ad oculos in emarginaturâ anticâ thoracicâ receptum. Oculi parvi postici laterales, ocelli 2 minuti distantes.

Antennæ capite dimidio longiores, sub clypei margine insertæ, depressæ, 4-articulatæ, articulo 1mo brevissimo, occulto; 2ndo omnium longissimo, 3tio brevi, 4to paullo longiori, elongato-ovato, præcedenti vix crassiori.

Promusci brevissima, pedes anticos vix attingens, 4-articulata, articulo 2ndo omnium longissimo.

Thorax transversus, anticè vix declivis, supra scutellum vix productus, marginibus lateralibus anticè rotundatis; anticè pro receptione capitis, emarginatus. Scutellum mediocre, triangulare. Sternum haud productum.

Pedes simplices sat graciles, femoribus cylindricis, tibiis rectis, tarsis (ut mihi videtur) tantum biarticulatis, unguibus membrana bifida instructis.

Hemelytra abdominis latera haud tegentia, corio vix coriaceo, nervis perpaucis et indistinctis, membranâque apicali nervis circiter 14 distinctis, longitudinalibus, interdum furcatis.

Abdomen magnum, fere circulare, supra depressum, apice emarginato, lateribus nudis.

Obs.—The simple sternum, rounded and depressed form, and very short antennæ and rostrum, will distinguish this curious genus from *Tesseratoma*, *Aspongopus* and others of the *Scutati*, which have only four joints in the antennæ.

Typus. *Cyclogaster pallidus*. Fig. 6.

Pallidè lutescens; capite, scutello, et thorace tenuissimè transversè punctatis, antennarum articulis intermediis obscurioribus rufescentibus.

Long. corp. lin. $12\frac{1}{2}$, lat. abdom. lin. 8.

Habitat in Gambiâ Africæ.

In Mus. Dom. Hope.

Obs.—Color lutescens in insecto viventi forsàn viridis.

Familia CAPSIDÆ.

Genus. EUCEROCORIS. Plate II. fig. 7.

Genus novum, è familiâ *Capsidarum*, inter *Phytocoridem* et *Capsum* intermedium, longitudine antennarum è *Cimicibus* omnibus Linnæanis distinctum.

Corpus parvum, gracile, *Myocoridem* parvam simulans.

Caput (7 a) parvum, transversum, oculis lateralibus, ocellis destitutum. *Antennæ* corpore toto fere triplo longiores, 4-articu-

latæ, articulis tribus primis longitudine fere æqualibus, 1mo crassiori, 4to brevi, filiformi (vix setaceo). *Promuscis* ad basin pedum posticorum extensa, 4-articulata, articulo 3tio longiori. *Thorax* in lobos duos divisus, lobo antico parvo capite angustiori, postico vero magno convexo. *Hemelytra* (7 c) abdomine dimidio longiora, tota fere membranacea, stigmatibus elongato nervoque brevi, ad apicem ejus emittente cum nervo altero (è basi interno membranæ emisso) connexo. *Pedes* elongati, graciles, femoribus posticis paullo curvatis. *Abdomen* ♀ ut in *Miride* formatum. *Tarsi* 3-articulati, ungues pulvillis duobus instructi (7 b).

Typus. *Eucrocotis nigriceps*. Fig. 7.

Testacea, capite supra antennisque nigris; hemelytris et alis fuscis.

Long. corp. lin. $3\frac{1}{2}$. Exp. alar. lin. 7. Long. antenn. lin. $9\frac{1}{2}$.

Habitat — ? In Mus. nostr. olim Haworthii.

Caput supra nigrum, nitidum, politum; subtus cum promuscide testaceo. Antennæ nigræ, articulo 1mo ad basin flavido. Thorax testaceus, nitidus. Scutellum fuscum. Abdomen et pedes testacea; tarsis omnibus, femoribus posticis ad apicem tibiisque posticis fuscis. Alæ cum hemelytris fuscae, horum macula parva basali albida, stigmatibus rufescenti, nervis nigris.

Obs.—I have seen but a single specimen of the curious insect which forms the type of this genus, which I purchased at the sale of the late Mr. Haworth's Collection. As there was no label attached to it, I am not aware of its locality. I should, however, conjecture, from its general appearance, that it is an inhabitant of Brazil.

Familia REDUVIIDÆ.

Genus. ENICOCEPHALUS. Plate II. fig. 8.

Corpus parvum, oblongum, depressum, anticè attenuatum.

Caput (8 a, 8 b) in lobos duos divisum, quorum posterior est globosus ocellisque in portione ejus antica positus, oculis magnis lateralibus in basin portionis anticæ capitis locatis.

Antennæ (8 a) thorace vix longiores, articulis 4, ultimo haud setiformi, præcedenti saltem crassitudine, interdum illo crassiori (articulis minutissimis rudimentalibus inter articulos 1 & 2, 2 & 3, et 3 & 4). *Promuscis* (8 b) brevissima, crassa, arcuata, ultra basin portionis anticæ capitis haud protensa, 3-articulata, articulo 2ndo longiori.

Thorax subconicus (8 *a*), in tres nodos transversè constrictus ; margine postico valde emarginato.

Pedes 2 antici dilatati, subraptorii, femoribus crassis, tibiæ apice (8 *c*) bispinoso, serieque setarum rigidarum armato, tarsis anticis compressis, (ut videtur 2-articulatis, articulo 1mo brevissimo), ungue unico valido armatis. *Pedes* 4 postici graciles, simplices ; tarsis (ut videtur) 3-articulatis (8 *d*), articulo 1mo brevissimo, 2do brevi tertioque longiori.

Hemelytra (8 *e*) homogœna, nervis perpaucis crassis è basi ad apicem extensis, in speciebus paullo discrepantibus, sed cellulam magnam centalem versus apicem hemelytrorum formantibus.

Obs.—The very remarkable head, thorax, fore-legs and hemelytra distinguish these curious insects, not only from the remainder of the extensive family of the *Reduviidæ*, but also from every other *Hemipterous* group. I am acquainted with four species; one from the West Indies, another from Bengal, the third imbedded in Gum Animè, and the fourth from Van Diemen's Land, a remarkably wide range for a group like this, which, from the singularity of its structure, might be presumed to be very limited in the extent of its geographical distribution.

Species 1. (Typus.) *Enicocephalus flavicollis*. Plate II. fig. 8.

Fuscus, antennis pallidioribus ; thoracis lobis duobus anticis, pedibus omnibus, rostro, et rotulâ caput cum thorace connectenti flavis ; scutello nigro, antennarum articulo ultimo præcedenti paullo crassiori.

Long. corp. lin. 2.

Habitat in Insulâ Sancti Vincentii. Dom. Guilding.

In Mus. Dom. Hope.

Species 2. *Enicocephalus basalis*.

Fusco-niger, antennarum articulo ultimo præcedenti fere graciliori ; capitis lobo postico, rotulâque caput cum thorace connectenti obscurè fulvescentibus ; hemelytris fuscis, basi fulvis, portione internâ pallidiori ; pedibus fulvescentibus, femoribus in medio tibiisque versus apicem fuscis.

Long. corp. lin. $3\frac{1}{4}$.

Habitat in Bengaliâ. In Mus. Dom. Hope.

Species 3. *Enicocephalus fulvescens*.

Pallidè fulvescens, oculis nigris, antennis (nisi articulis 1 et 4 et annulis rudimentalibus albidis), pedibus anticis thoracisque

lobo intermedio obscurè fuscis; thoracis angulis posticis albidis, nervis hemelytrorum obscurioribus.

Long. corp. lin. 3.

Individuum vidi unicum in Gummâ Animè inclusum. In Mus. Dom. Strong.

Species 4. *Enicocephalus Tasmanicus*.

Piceus, pilosus, antennis concoloribus; pedibus fuscis, geniculis omnibus, margineque interno femorum anticorum fulvescentibus; hemelytris et alis pallidè fuscis, nervis obscurioribus; margine externo hemelytrorum ad basin albido.

Long. corp. (alis clausis) lin. $3\frac{3}{4}$.

Habitat in Terrâ Van Diemenii.

In Mus. nostr. Communicavit Dom. Ewing, M. E. S.

V. *Remarks on the Turnip Fly* (*Haltica nemorum*). By HENRY LE KEUX, Esq.

(Tab. IV.)

HAVING thrown my notes together relating to the Turnip Fly, with such additional information upon the subject generally as I have been enabled to acquire, I have now the pleasure to lay them before the Society. I have made drawings (which I send with this) of the eggs, of the larva, and of its mode of burrowing in the turnip leaf, and also of the perfect insect, which, together with the accompanying figure of the pupa, by Mr. J. O. Westwood, will make the series of figures of the different states of the insect complete. I also send a small portion of a turnip leaf, with three eggs of the *Haltica* upon it, preserved in spirits.

Having witnessed the destructive effects of the Turnip Fly in the year 1830, whilst lodging at a farm-house in Devonshire, I was led to observe its habits, and to try many experiments, in the hope of being able to find some means of guarding against its attacks. My first observations were made upon a field of about eight acres, forming the apex of a hill, which was sown with turnips. When the young plants were just rising above the ground, the wind was in the south-east, and continued to blow from that point for more than a week, carrying in its course the scent of the turnips over